WTCI-45-P

WC98-1102 - CARR FUTURES
1 WTC 92 FL

Quality Assurance Division
Design Standards

TAA No. WC1 - 1107 Charge Code: WBXX-981.102

Tenant: CABR FUTURE

REVIEW STATUS

Submission No. & Date	Response To	Coordinator's Initial	Memo Date	Approval Date	Facility Rider	Outstanding Comments	Remarks/Status	DWG/SPEC Location
1) 11/1/98	-	DR	2/5/98	DO	-	17	-	XXX-B2 138

BUCKSLIP THE PORT AUTHORITY OF NY & NJ

TO: Gerry Gaeta Location WTC 88S

FROM: **Saroj Bhol**/51N/(212)435-8575

DATE: 19 May 1998

REF: TAA ~~WC 98-1120, TAIPEI BANK~~ WC98-1102, CARR FUTURES * - 1 WTC - 92ND FLOOR

For the referenced TAA, the glass door with water curtain on the occupied side would be acceptable in the rated corridor. The acceptance is based on a request by the architect of record for reconsideration of the glass and sprinkler assembly as a two-hour fire resistance rated equivalency permitted for atriums under NYC Building Code Section 27-521.3(d).

cc: C. J. Lin, R. Pisapia, D. Remeta
J. Richardson

* Reference TAA No. and the Tenant's name corrected on 6/24/98 -

Post-it® Fax Note 7671	Date 6/24/98	# of pages ▸ 1
To J. RICHARDSON	From SAROJ BHOL	
Co./Dept. WTC	Co. QAD	
Phone #	Phone #	
Fax # 8168	Fax #	

§ 27-516*(C26-718.7)* **Pressurization system.** Air-supported structures shall be inflated and shall remain inflated during all periods of occupancy to a minimum differential pressure of 0.88 in and a maximum differential pressure of 1.50 in. of water. Ventilation flow per occupant, either through vents or anticipated leakage, shall comply with the requirements of subchapter twelve of this chapter.

Occupied spaces. Where the net floor area per occupant is one hundred fifty square feet or less, the structure shall be provided with at least two blowers, each of which shall have adequate capacity to maintain the required inflation pressure. Also, an auxiliary engine-generator set capable of powering one blower, or a supplementary blower powered by an internal combustion engine, either of which shall have the capacity to run continuously for four hours, shall be located outside the structure, shall be weather protected, and shall be arranged to automatically operate the blower within twenty seconds upon failure of the normal source. Heat shall be provided from a source outside the structure so arranged as to prevent the spread of fire to the structure. The temperature within the air-supported structure shall be maintained at the temperature required by subchapter twelve of this chapter, but not less than fifty degrees Fahrenheit during periods of snowfall.

§ 27-517*(C26-718.8)* **Certificate of occupancy.** Certificates of occupancy for tents or air-supported structures shall be issued for a period not exceeding one year, and such certificates may be renewed for one year periods thereafter if the tent or air-supported structure complies with all laws, rules and regulations in effect at the time of request for renewal.

ARTICLE 20
OCCUPANCIES INVOLVING STORAGE OF NITRIC ACID

§ 27-518*(C26-719.1)* **Application.** This article shall apply to the construction, alteration and use of buildings or spaces wherein nitric acid is stored.

§ 27-519*(C26-719.2)* **Location.** Carboys containing nitric acid shall be stored in storage vaults.

§ 27-520*(C26-719.3)* **Construction requirements.** (a) Vaults shall be constructed of incombustible acid-resistant material with a fire resistance of at least one hour.

(b) Doors opening into such storage vaults shall be self-closing, noncombustible fire doors with a fire-protection rating of at least three quarters of an hour.

(c) Vault floors shall be constructed of acid-resistant brick, concrete treated with sodium silicate or other acid-proof material and shall incorporate a dike constructed of the same material, whose height shall be adequate to contain the acid plus the neutralizing substance that would be necessary to neutralize said acid plus six inches.

(d) The floor shall be provided with a valved drain which shall be connected to the drainage system in accordance with the requirements of subchapter sixteen of this chapter.

§ 27-521*(C26-719.4)* **Ventilation.** Mechanical ventilation systems for storage vaults shall be adequate to effect ten complete air changes per hr. Exhaust shall be taken from within twelve inches above the level of the top of the dike. The exhaust system shall be independent of exhaust systems serving other parts of the building and the openings to the outdoors shall be located in accordance with the provisions of subchapter thirteen of this chapter for system conveying vapors.

ARTICLE 21
ATRIUMS

§ 27-521.1(C26-720.1)* **Applicability.** This article shall apply to the construction, alteration and use of atriums.

§ 27-521.2(C26-720.2)* **Classification.** An atrium shall be classified in occupancy group F-3.

§ 27-521.3(C26-720.3)* **Construction.** (a) Atriums may be constructed only in buildings in noncombustible construction groups 1-A, 1-B and 1-C.

(b) An atrium shall be fully enclosed except that openings of any size into the two lowest levels of an atrium shall be permitted if such openings are provided with opening protectives having a fire-resistance rating of at least one and one-half hours or are provided with sprinklers no more than six feet apart.

(c) The minimum horizontal clear dimension of an atrium shall be forty feet, provided, however that this dimension can be reduced to twenty feet where sprinkler spacing on the occupied side adjacent to glass panels authorized by subdivision (d) of this section is no more than four feet or the minimum atrium area is twelve hundred square feet.

(d) Atrium enclosing walls shall be of at least two hour fire-resistant construction or of glass that is wired, laminated, or tempered and is provided with sprinklers on the occupied side spaced no more than six feet apart, except as otherwise permitted by subdivision (c) of this section.

§ 27-521.4(C26-720.4)* **Fire protection equipment.** (a) Smoke detectors. In all spaces opening onto an atrium, a smoke detecting system shall be installed in accordance with the requirements of reference standard RS 17-5E.

(b) **Standpipes.** At least one standpipe outlet in addition to a riser or risers within required stairways, shall be installed in every atrium.

(c) **Sprinklers.** (1) Every story or mezzanine within an atrium that overhangs another story or mezzanine within fifty feet shall have the overhang sprinklered in accordance with section 27-956 of article four of subchapter seventeen of this chapter, except that atrium ceilings less than fifty feet above the atrium floor but more than thirty feet above the floor may alternatively be provided with smoke detectors, which shall be of the central supervisory type connected to an approved central station. Every room or space opening onto the atrium shall be sprinklered, no matter where located.

(2) Except as otherwise permitted by subdivision (c) of section 27-521.03 of this article, at glass panels permitted by subdivision (d) of such section, sprinklers on the occupied side at all levels shall be spaced six feet apart parallel to the glass and that distance away from the glass panels so as to insure complete glass wetting upon activation. No obstructions to such wetting capability shall be permitted.

(3) Every sprinkler system for an atrium shall be provided with sources of water supply in accordance with article four of subchapter seventeen of this chapter.

§ 27-521.5(C26-720.5)* **Means of egress.** (a) No vertical exits shall discharge into an atrium at any level.

(b) Atrium corridors shall have a width equal to or greater than one hundred fifty per cent of that required by either table 6-1 of subchapter six or table 8-1 of subchapter eight, as applicable.

(c) An unenclosed path of travel to a required exit shall be permitted, except that access to one of the required vertical exits shall be only through an enclosed passageway or corridor conforming to the requirements for exits of subchapter six.

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*L.1986, chap. 839, eff. 9/1/86

THE PORT AUTHORITY OF NY & NJ

NE WORLD TRADE CENTER
NEW YORK, NY 10048

(212) 435-7000
(973) 961 6600

FILE RTP
TAA # WC 98-1102

February 6, 1998

Mr. David Mangold
Carr Futures
2 World Trade Center
New York, NY 10048

RE: CARR FUTURES - 1 WTC, 92ND FLOOR - T.A.A. 981102 - SUBMISSION 1 - SELF CERTIFICATION - RELEASED FOR CONSTRUCTION - REVISED

Dear Mr. Mangold:

This letter responds to your consultants transmittal dated December 24, 1997, requesting review of the documents listed in Attachment A to this letter.

Please be advised that these documents are released for construction, subject to compliance with the requirements listed in Attachment "B" to this letter.

Incorporate the requirements of the comments into the documents, respond to them in writing and submit the required information for our approval along with eight (8) sets of the revised documents. The revised documents must be signed and sealed by a Professional Engineer or Registered Architect licensed to practice in the State of New York. Please indicate all revisions and dates clearly.

Prior to any construction the certifying Architect or Engineer must contact Mr. Joseph Napolitano at (212) 435-7285 to arrange a pre-construction meeting to discuss work scheduling and compliance with specific Port Authority requirements pertaining to work on the premises.

At the completion of the construction for this Tenant Alteration Application, please have your Consultant-of-record submit a set of signed and sealed Mylar reproducibles and a CADD disk, to this office. Each reproducible shall be marked "Certified As-Built," and shall also be signed and verified by the general contractor.

bcc: D. Bergstein, B. Colendenski*, E. Daly*, G. Donohue, Fadavi, G. Gaeta, E. Monteverde, J. Napolitano, R. Pisapia**, J. Protas N. Seliga, Central File*, Chrono File*

THE PORT AUTHORITY OF NY & NJ

All correspondence and inquiries should be directed to: Mr. Sam Murray, at One World Trade Center, 88 South, New York, NY 10048, telephone (212)435-8240.

Sincerely,

Gerard Gaeta, Supervisor
Tenant Alteration Application Unit
World Trade Department

cc: S. Murray, G. Melendez, J. Del Brocco(Gensler), G. Gaeta, B. O'Hea (Van Nostrand), A. Friedman, T. Koebel, Central File, Chrono File

Please copy
QAD
Also
-Thanks

THE PORT AUTHORITY OF NY & NJ

ATTACHMENT A - LIST OF DOCUMENTS
T.A.A - 981102

Carr Futures

Drawing	Date
A0.1	1/06/98
A0.2	12/22/97
A0.3	12/22/97
A0.4	12/22/97
A0.5	12/22/97
92-A.1	12/22/97
92-A.2	12/22/97
92-A.3	12/22/97
92-A.4	12/22/97
92-A.5	12/22/97
92-A.6	12/22/97
A7.1	12/22/97
A8.1	12/22/97
A8.2	12/22/97
A8.3	12/22/97
A8.4	12/22/97
A8.5	12/22/97
PA-S-1	11/05/91
92-M-1	12/24/97
92-M-2	12/24/97
92-M-3	12/24/97
92-M-4	12/24/97
92-M-5	12/24/97
92-M-6	12/24/97
92-E-1	12/24/97
92-E-2	12/24/97
92-E-3	12/24/97
92-E-1	12/24/97
92-E-4	12/24/97
92-E-5	12/24/97
92-E-6	12/24/97
92-P-1	12/24/97
92-P-2	12/24/97
92-P-3	12/24/97

Drawing	Date
92-FP-1	12/24/97
92-FP-2	12/24/97
92-FP-3	12/24/97
92-T-1	12/24/97
92-T-2	12/24/97
92-T-3	12/24/97
92-T-4	12/24/97

(End of Documents) 020698

ATTACHMENT B - LIST OF COMMENTS
T.A.A. 981102

Carr Futures

Note: The letter in parenthesis following the comment number are for Port Authority use only.

Structural

1.(W) DWG. A0.5, Hardware Schedule, Paragraph A: Provide a detail of the necessary embedment for the "floor closer." Show, by dimension, the extent of demolition needed to install the above floor closer.

2.(W) DWG. 92-A.1: Provide all missing section and elevation marks. Also, coordinate the given section and elevation marks with the appropriate drawings.

3.(W) DWGS. 92-A.3 and 92-P-3:

a) There appears to be a proposed core hole in the restricted zone at the intersection of column lines 142/202 on DWG. 92-A.3 and two at column lines 129/215 and 134/214 on DWG. 92-P-3. Either relocate these cores outside the restricted zone, or refer to the W.T.C. Design Guidelines, DWGS. STR-02 through STR-08 for rebar repair details and make them part of the set.

b) Locate all proposed cores by dimension using the face of glass as a reference.

4.(W) DWGS. 92-A.1, 92-A.4, 92-M-2 and 92-T-2:

a) DWG. 92-A.4: Provide a file cabinet legend marking, on this drawing, their sizes and number of tiers.

b) Check to see that the existing construction is not overloaded due to the added weight of the file cabinets, millwork storage shelving, raised floor, all equipment, etc.

5.(W) DWG. A8.1, Partition Type A1: Do not attach partitions to the ceiling system. Instead continue the studs to the concrete slab above specifying the fastener type, size, spacing, and embedment length into the existing construction.

6.(W) DWG. A8.3, Details 7 and 8: Coordinate the cold rolled channel's size and spacing with those shown on DWG. A0.1, Typical Ceiling Detail and DWG. PA-S-1.

7.(Q) Drawing 92-M-4, Duct Hanging Detail Type A. Specify the size of the beam clamp and auxiliary structural steel.

8.(Q) Revise partition detail to avoid connection to the floor truss, as per PANYNJ Standard Design Drawing.

9.(Q) Drawing A8.3, Ceiling Details. All Suspended Ceiling Details shall be revised as per PANYNJ Tenant Construction Review Manual, Attachment S-2. Please note that attachment of hangers of any kind to slab above is not permitted except at truss ends.

10.(Q) Verify that the existing construction is not overstressed under the added loads in File Rooms 9221, 9225, 9227 Storage Rooms, 9203, 0223, 9257; and Mechanical Room 9221.

Architectural

11(W) Verify if type B partition is an one-hour rated wall. It is used in demising wall and its fire rating is not specified on Drawing A8.1. Also, one and two hour-rated partitions shown on egress plan are not matching the construction plan shown on Drawing 92-A.1. Please clarify.

12.(Q) Drawing A0.4, Finish Schedule:

a) Carpet test reports from an independent testing laboratory shall comply with the flammability data, in accordance with the NYC Building Code Section 27-351.

b) The proposed plastic laminated panels and the fabric covered panels shall be MEA approved.

13.(Q) Drawing A0.5, Door and Hardware Schedule. All glass doors (including sidelights) require glass markings in accordance with BS&A Calendar No. 501-68-SR.

14.(Q) Drawing 92-A. 1- Construction Plan. Door 1A/7A to the existing fire corridor shall have a 1-1/2 hour fire rating or shall comply with Code Section 27-369(i).

ARCHITECTURAL/ELECTRICAL

15.(Q) Drawing A0.5, Hardware Schedule/Notes. Hardware Sets A and K show the following: Electromagnetic Lock, Electrified Lockset, Push Button Release, Card Reader, and Motion Sensor. All electrically operated locks on doors that are in the path of egress, shall be made readily openable manually, without delay, at all times from the side from which egress is to be made. Refer to NYC Building Code Section 27-371(j)(1)a. Also, please note that there is no City of New York approved combination of motion sensor and an electrically operated lock for the purpose of releasing such a lock. Remote push button operation to unlock egress doors or routing release circuit through a computer system (as indicated in the Specifications, Section 16703, Part 1.02), or through the Class 'E' System as indicated in Note 1 are not Code compliant.

HVAC

16(W) Drawing 92-M-1:

a. Condenser water C: Design Criteria B: Delete the water temperature for system 9 which is not applicable to this job and temperature is not 900 deg. F.

b. In condenser water closet on 93rd floor, use 3" valved outlets for future, not 2". This comment also applies to Drawing 92-M-6.

c. Air from base building interior systems shall not be supplied to exterior zone, for example, in Conference room 9244. Please revise.

d. Delete the following induction units: between columns 144/145, 156/157, and 202/203.

e. The induction units located between columns 146/147, 152/153, 155/156, 424/425, 443/444, 449/450 will be reduced to one-half capacity. All induction unit modification shall use PA/WTC standard symbols listed on Drawing 92-M-1.

f. The following note shall apply to new fire-rated walls at Columns 243 and 424:

Remove existing 4" round flexible duct connection that penetrates the fire rated closure panel within the induction unit cover. Install new 4", 26 gauge galvanized steel circular duct, seal all joints with 3M Company 800 sealant and stainless steel adjustable type clamps.

g Delete the fire damper installation for two base building interior ducts 40x16 and 17 x 8 through new one-hour-rated demising walls

h Verify the return air path inside computer room 9208 since base building return air stud has been extended outside the computer room.

17(W) Specification:

a. P. 15100-4 Add the following valve specifications:

Combination Balancing & Shutoff Valves shall be the eccentric non-lubricated plug valve, with adjustable memory stop and pressure tap, as manufactured by DeZurik. Rated working pressure and hydrostatic testing pressure (one and one-half times of rated working pressure) must be specified.

For Working Pressure From 200 psig through 450 psig:

1) Sizes 2 in. and under, DeZurik Series 100, Fig.128/WG/SP, screwed, carbon steel conforming to ANSI Class 300.

2) Sizes 2-1/2 in. and up, DeZurik Series 100, Fig.128 DFX001, flanged, carbon steel conforming to ANSI Class 300.

Condenser Water Regulating Valves shall be two-way, refrigerant pressure actuated, positive shutoff type, as manufactured by Metrex, Model WCCW-3099-SE-2W Series, design working pressure up to 350 psig.

b. P. 15851-7, K: Use two way head pressure water regulating valve, not three way. No condenser water flow shall be permitted when the compressor of AC unit is off. This comment applies to all AC unit specification.

c P. 15890-6 K.3 Flexible Duct: Maximum length is three feet to air terminal devices, not five feet. Please revise.

d P. 15890-8 15 c: All square elbows shall be provided with turning vanes maximum 4 inch on center.

e P.15910-4: Please add PA/WTC fire damper specification. Refer to PA/WTC Tenant HVAC Guide Specification Section 6 for details.

f P. 15990-4: Please add induction unit modification as a part of scope for air balancing work.

18.(Q) Drawing 92-M-1, Ventilation Index. Provide an index for ventilation for each occupiable room to establish compliance with NYC Building Code Sections 27-753 and 27-754.

19.(Q) Drawing 92-M-2, Floor Plan. Provide a combination fire/smoke damper at each penetration of 2-hour fire rated partitions of Computer (9208) and Mechanical (9211) Rooms by duct shown on the plan, as per NYCBD Technical Policy and Procedure Notice #6/96, dated 6/21/96.

Plumbing

20(W) Change from 2 WTC to 1 WTC in all key plans of plumbing and fire protection drawings.

21(W) Drawing 92-P-2: Show the sizes of all future outlets: 4" for waste, 3" for vent, 2" for cold water, and 1" for hot water.

Specification

22(W) P. 15410-3 Piping Material: Please note that waste pipe should have same type of material for indirect waste, soil and vent piping.

Fire Protection

23.(Q) Drawing 92-FP-1:

a) NYC Building Department Fire Standpipe Note 20: Revise to read "...above final grade."

b) General Note 7: Revise to read "Contractor shall prepare hydraulic calculations and plans, and submit to the Engineer for approval."

c) General Note 8: Revise to read "The heads must be chrome plated."

24.(Q) Drawing 92-FP-2, Note 4: Revise to read "The heads must be chrome plated."

25.(Q) Drawing 92-FP-3, Fire Hose Cabinet Detail: Revise Detail 'A' to show "PR-407H" cast brass angle valve.

26.(Q) Specification Section 15300:

a) Section 1.01A: Last sentence shall read "Contractor shall perform hydraulic calculations and submit to Engineer for approval."

b) Mechanical grooved fittings are not permitted. Revise Sections 1.04C. 1. e. and 2.01, accordingly.

c) Section 2.04A: Revise to read "Potter-Roemer Figure #4075H, 2-1/2" angle hose valves, tested and certified to 1000 pounds for fire standpipe service in tower buildings are in stock at the WTC Stockroom and are available for WTC Contractors, as required."

d) Section 2.04D: Revise to read "Provide Potter-Roemer Figure 2766, 2-1/2" brass adjustable pressure reducing valve where normal hydrostatic pressure at 2-1/2" hose outlet exceeds 85 psig.

e) Section 2.08D: Add maximum hanger spacing.

f) Section 2.10A: Revise to read "Provide 4-1/2" dial gauges..."

g) Section 2.14 B.2: Revise to read "...Model A, chrome plated."

h) Add following "2.21 Insulation: Insulate all sprinkler piping and fittings parallel to and within 15 feet of exterior wall with Manville Micro LOCK Fiberglas pipe insulation with all service jacket, or approved equal. All insulation (including jacket, or facing and adhesive) shall have composite fire and smoke hazard ratings, as tested by procedure ASTM E-84, NFPA 255 and UL 723 not exceeding a "Flame Spread" of 25 and "Smoke Developed" of 50."

i) Section 3.01 H: No deluge systems are in submitted scope of work; delete item.

J) Section 3.04 A: Revise to read "...and obtain required approvals."

27(W) Drawing 92-FP-1:

a. General note 5: Add the following shutdown requirement:

The Contractor shall request fire standpipe riser and sprinkler shutdowns 48 hours in advance by notifying the PA/WTC Construction Inspector who will coordinate the shutdown. The Contractor shall insure that drainage will be discharged to an approved location or receptacle without causing damage to other work and property.

b. General notes 8: The cover plate of sprinkler heads must be chrome plated, not factory painted white finish. This comment also applies to Note 4 on Drawing 92-FP-2. Please revise.

28(W) Drawing 92-FP-2:

a. All tenant auxiliary hose stations must be connected to the existing capped outlets provided in Stairway B (Stairway 3), not in any other Stairways. Show FSP pipe sizes. Control valve will be required between hose station valve and riser branch if that branch serves three or more hose stations.

b. Provide portable fire extinguishers, to comply with New York City Fire Department Directive, dated September 17, 1980.

29(W) Drawing 92-FP-3:

a. PR-2766 pressure restricting device is required on the 92nd floor, with setting of 9. Please revise.
b. Fire hose cabinet detail: Use PR-2960 fog nozzle, not PR-2962. Use 125 ft. lined linen hose, not unlined linen hose.

30(W) Specification:

a. Add the sprinkler pipe insulation: Insulate all sprinkler piping and fittings within 15 feet of exterior wall with Manville Micro LOK fiberglass pipe insulation with all service jacket, or approved equal. Insulation shall be one inch thick with flame spread and smoke developed rating not exceeding 25/50.

b. P. 15300-4, C Design Criteria: Delete all grooved connections. The static pressure at the inlet of control valve on the 92nd floor of 1 WTC is 98.7 psig.

c. P. 15300-5,6: Revise the pipe and fittings as follow:

1. All wet system sprinkler piping shall be standard weight, Schedule 40 black steel pipe, conforming to ASTM A795/A53

with threaded cast iron fittings, Class 125, or malleable iron fittings, Class 150. Schedule 10 pipes, grooved piping, and mechanical grooved fittings are not permitted. Victaulic fittings are not permitted to be used for size 3 in. and under unless otherwise approved.

2. Nipples shall be extra-heavy, shoulder type, and of the same material as the pipe. Close nipples, adjustable sprinkler nipples, and bushings shall not be used.

3. Unless otherwise shown on the Contract Drawings, piping connections to equipment shall be made up with unions for piping 2 in. and smaller, and shall be flanged for piping 2-1/2 in. and larger.

4. Fire standpipe material for zone 2, 89th through 101st floors, shall be standard weight, schedule 40, black steel pipe, conforming to ASTM A53 with threaded cast iron fittings, Class 250, 350 # wwp. Fire standpipe test shall be hydrostatic at 200 psig. for 2 hours.

d P. 153000-7, 2.04 and 2.05: Delete A,B,C and D. Cross reference to detail shown on Drawing 92-FP-3.

e. P.15300-8, 2.08 D: Revise as follow:

Unless otherwise specifically approved, hanger size and spacing shall be within the following limits:

Pipe Size	Max. Hanger Spacing	Min. Rod Size
1"	8 ft. o.c.	3/8"
1-1/4" to 2"	10 ft. o.c.	3/8"
2-1/2" to 3-1/2"	12 ft. o.c.	½"
4" and 5"	12 ft. o.c.	5/8"

The above hanger spacings apply to straight runs of pipe only. At points where valves, specialties, or branch connections are located, additional hangers, or supports shall be used to properly support the load.

f. P. 15300-10: Please note that Central Sprinkler is not permitted to use in PA/WTC. Revise sprinkler specification as follow:

In all finished areas, sprinkler heads shall be Reliable Automatic Sprinkler Co., Model G4 "Concealer," BS&A 587-75-SA, with a 165° F temperature rating. The cover plate of heads must be chrome plated, not factory painted white. For 1, 2, and 5 WTC, orifice size shall be ½", in 4 WTC orifice size shall be 7/16". Sprinkler heads in areas without hung ceiling shall be upright or pendent type, Reliable Automatic Sprinkler Co., Model G, BS&A 587-75-SA, with a 165° F temperature rating. For 1, 2, and 5 WTC, orifice size shall be ½", in 4 WTC orifice size shall be 7/16". For on/off type heads, use Reliable.

Electrical

31.(W) Drawing E-102. Provide load data including diversity factors. Power at six watts per square foot (usuable) is available from the building system.

32.(W) Drawing E-317P: Speaker and strobe design is not acceptable as shown Please call Rob Becker at 435-8641 prior to the next submission.

33. Drawing 92-E-2, Single Line Diagram:

a) The size of the grounding electrode conductor at the secondary of the transformer (no rating indicated on the drawing) is shown as #10. For #6 phase conductors, the size of the grounding electrode conductor is #8, as per NEC Table 250-94. Please comply.

b) The overcurrent protection of the transformer in (a) shall comply with NEC Section 450-3(b).

c) The overcurrent protection for the feeder (4#2) from Panel ELP-92-NA to Panel ELP-92-NA shall comply with NEC Section 240-3.

34. Drawing 92-E-3. A junction box for heat tracing is shown. Ground-fault protection of equipment shall be provided for each branch circuit supplying electric heating equipment. Refer to NEC Section 427-22.

35. Drawing 92-E-5:

a) Work Station Detail. Electrified partitions and furniture shall be approved for use in NYC. Refer to NYC Electrical Code Section 27-3027(b).

b) Emergency Equipment Shutdown Wiring Diagram. The control for the disconnecting means to disconnect power to all electronic equipment and the dedicated HVAC system in the Computer Room shall be grouped and identified and shall be readily accessible at the principal exit doors. See NEC Section 645-10.

END OF COMMENTS 020698

THE PORT AUTHORITY OF NEW YORK & NEW JERSEY

M E M O R A N D U M

To: Mr. Lou Menno, General Manager, World Trade Tenant Services
From: C. John Lin, P.E.
Date: February 3, 1998
Subject: **WTC - ALTERATION APPLICATION WC-981102 - CARR FUTURES - 92ND FLOOR - ONE WORLD TRADE CENTER**

Reference: Review Request dated 1/21/98

Copy To: A. Fadavi, G. Gaeta, T. O'Connor, J. Napolitano, Job Folder, Chrono Folder

An audit of the material submitted with the referenced request has been made.

There are seventeen (17) comments on the attached rider.

Drawings: Specifications:

Calculations:

REMARKS: This memorandum was transmitted to the Facility via OA on February 5, 1998.

for Ron Prasara
C. John Lin, P.E.
Acting Manager
Quality Assurance Division

I.D.: WC98-1102-001
DR/al
att.

Reviewers:
D. Remeta, Coordination and Architectural; T. Santa Maria, Electrical; Z. Goldenberg, HVAC; H. MacDonald, plumbing; C.S. Lee, Structural; D. Luey, Fire Protection.

RIDER

ALTERATION APPLICATION WC-981102

ARCHITECTURAL/ELECTRICAL

1. Drawing A0.5, Hardware Schedule/Notes. Hardware Sets A and K show the following: Electromagnetic Lock, Electrified Lockset, Push Button Release, Card Reader, and Motion Sensor. All electrically operated locks on doors that are in the path of egress, shall be made readily openable manually, without delay, at all times from the side from which egress is to be made. Refer to NYC Building Code Section 27-371(j)(1)a. Also, please note that there is no City of New York approved combination of motion sensor and an electrically operated lock for the purpose of releasing such a lock. Remote push button operation to unlock egress doors or routing release circuit through a computer system (as indicated in the Specifications, Section 16703, Part 1.02), or through the Class 'E' System as indicated in Note 1 are not Code compliant.

ARCHITECTURAL

2. Drawing A0.4, Finish Schedule:

   a) Carpet test reports from an independent testing laboratory shall comply with the flammability data, in accordance with the NYC Building Code Section 27-351.

   b) The proposed plastic laminated panels and the fabric covered panels shall be MEA approved.

3. Drawing A0.5, Door and Hardware Schedule. All glass doors (including sidelights) require glass markings in accordance with BS&A Calendar No. 501-68-SR.

4. Drawing 92-A. 1- Construction Plan. Door 1A/7A to the existing fire corridor shall have a 1-1/2 hour fire rating or shall comply with Code Section 27-369(i).

ELECTRICAL

5. Drawing 92-E-2, Single Line Diagram:

   a) The size of the grounding electrode conductor at the secondary of the transformer (no rating indicated on the drawing) is shown as #10. For #6 phase conductors, the size of the grounding electrode conductor is #8, as per NEC Table 250-94. Please comply.

b) The overcurrent protection of the transformer in (a) shall comply with NEC Section 450-3(b).

c) The overcurrent protection for the feeder (4#2) from Panel ELP-92-NA to Panel ELP-92-NA shall comply with NEC Section 240-3.

6. Drawing 92-E-3. A junction box for heat tracing is shown. Ground-fault protection of equipment shall be provided for each branch circuit supplying electric heating equipment. Refer to NEC Section 427-22.

7. Drawing 92-E-5:

a) Work Station Detail. Electrified partitions and furniture shall be approved for use in NYC. Refer to NYC Electrical Code Section 27-3027(b).

b) Emergency Equipment Shutdown Wiring Diagram. The control for the disconnecting means to disconnect power to all electronic equipment and the dedicated HVAC system in the Computer Room shall be grouped and identified and shall be readily accessible at the principal exit doors. See NEC Section 645-10.

HVAC

8. Drawing 92-M-1, Ventilation Index. Provide an index for ventilation for each occupiable room to establish compliance with NYC Building Code Sections 27-753 and 27-754.

9. Drawing 92-M-2, Floor Plan. Provide a combination fire/smoke damper at each penetration of 2-hour fire rated partitions of Computer (9208) and Mechanical (9211) Rooms by duct shown on the plan, as per NYCBD Technical Policy and Procedure Notice #6/96, dated 6/21/96.

STRUCTURAL

10. Drawing 92-M-4, Duct Hanging Detail Type A. Specify the size of the beam clamp and auxiliary structural steel.

11. Revise partition detail to avoid connection to the floor truss, as per PANYNJ Standard Design Drawing.

12. Drawing A8.3, Ceiling Details. All Suspended Ceiling Details shall be revised as per PANYNJ Tenant Construction Review Manual, Attachment S-2. Please note that attachment of hangers of any kind to slab above is not permitted except at truss ends.

13. Verify that the existing construction is not overstressed under the added loads in File Rooms 9221, 9225, 9227 Storage Rooms, 9203, 0223, 9257; and Mechanical Room 9221.

FIRE PROTECTION

14. Drawing 92-FP-1:

    a) NYC Building Department Fire Standpipe Note 20: Revise to read "...above final grade."

    b) General Note 7: Revise to read "Contractor shall prepare hydraulic calculations and plans, and submit to the Engineer for approval."

    c) General Note 8: Revise to read "The heads must be chrome plated."

15. Drawing 92-FP-2, Note 4: Revise to read "The heads must be chrome plated."

16. Drawing 92-FP-3, Fire Hose Cabinet Detail: Revise Detail 'A' to show "PR-407H" cast brass angle valve.

17. Specification Section 15300:

    a) Section 1.01A: Last sentence shall read "Contractor shall perform hydraulic calculations and submit to Engineer for approval."

    b) Mechanical grooved fittings are not permitted. Revise Sections 1.04C. 1. e. and 2.01, accordingly.

    c) Section 2.04A: Revise to read "Potter-Roemer Figure #4075H, 2-1/2" angle hose valves, tested and certified to 1000 pounds for fire standpipe service in tower buildings are in stock at the WTC Stockroom and are available for WTC Contractors, as required."

    d) Section 2.04D: Revise to read "Provide Potter-Roemer Figure 2766, 2-1/2" brass adjustable pressure reducing valve where normal hydrostatic pressure at 2-1/2" hose outlet exceeds 85 psig.

    e) Section 2.08D: Add maximum hanger spacing.

    f) Section 2.10A: Revise to read "Provide 4-1/2" dial gauges..."

    g) Section 2.14 B.2: Revise to read "...Model A, chrome plated."

h) Add following "2.21 Insulation: Insulate all sprinkler piping and fittings parallel to and within 15 feet of exterior wall with Manville Micro LOCK Fiberglas pipe insulation with all service jacket, or approved equal. All insulation (including jacket, or facing and adhesive) shall have composite fire and smoke hazard ratings, as tested by procedure ASTM E-84, NFPA 255 and UL 723 not exceeding a "Flame Spread" of 25 and "Smoke Developed" of 50."

i) Section 3.01 H: No deluge systems are in submitted scope of work; delete item.

J) Section 3.04 A: Revise to read "...and obtain required approvals."

THE PORT AUTHORITY OF NY & NJ

ONE WORLD TRADE CENTER
NEW YORK, NY 10048

(212) 435-7000
(973) 961 6600

THE PORT AUTHORITY OF N
QUALITY ASSURANCE
ENGINEERING DEP
FEB 6 1998
RECEIVED
NOTED
REFERRED TO: RTP WC

98-1102

February 2, 1998

Mr. David Mangold
Carr Futures
2 World Trade Center
New York, NY 10048

RE: CARR FUTURES - 1 WTC, 92ND FLOOR - T.A.A. 981102 - SUBMISSION 1 - SELF CERTIFICATION - RELEASED FOR CONSTRUCTION

Dear Mr. Mangold:

This letter responds to your consultants transmittal dated December 24, 1997, requesting review of the documents listed in Attachment A to this letter.

Please be advised that these documents are released for construction, subject to compliance with the requirements listed in Attachment "B" to this letter. Further comments generated as a result of our review of these documents will be forwarded to you as soon as the review is complete.

Incorporate the requirements of the comments into the documents, respond to them in writing and submit the required information for our approval along with eight (8) sets of the revised documents. The revised documents must be signed and sealed by a Professional Engineer or Registered Architect licensed to practice in the State of New York. Please indicate all revisions and dates clearly.

Prior to any construction the certifying Architect or Engineer must contact Mr. Joseph Napolitano at (212) 435-7285 to arrange a pre-construction meeting to discuss work scheduling and compliance with specific Port Authority requirements pertaining to work on the premises.

At the completion of the construction for this Tenant Alteration Application, please have your Consultant-of-record submit a set of signed and sealed Mylar reproducibles and a CADD disk, to this office. Each reproducible shall be marked "Certified As-Built," and shall also be signed and verified by the general contractor

bcc: D. Bergstein, B. Colendenski*, E. Daly*, G. Donohue, Fadavi, G. Gaeta, E. Monteverde, J. Napolitano, R. Pisapia**, J. Protas N. Seliga, Central File*, Chrono File*

All correspondence and inquiries should be directed to: Mr. Sam Murray, at One World Trade Center, 88 South, New York, NY 10048, telephone (212)435-8240.

Sincerely,

Gerard Gaeta, Supervisor
Tenant Alteration Application Unit
World Trade Department

cc: S. Murray, G. Melendez, J. Del Brocco(Gensler), G. Gaeta

ATTACHMENT A - LIST OF DOCUMENTS
T.A.A - 981102

Carr Futures

Drawing	Date
A0.1	1/06/98
A0.2	12/22/97
A0.3	12/22/97
A0.4	12/22/97
A0.5	12/22/97
92-A.1	12/22/97
92-A.2	12/22/97
92-A.3	12/22/97
92-A.4	12/22/97
92-A.5	12/22/97
92-A.6	12/22/97
A7.1	12/22/97
A8.1	12/22/97
A8.2	12/22/97
A8.3	12/22/97
A8.4	12/22/97
A8.5	12/22/97
PA-S-!	11/05/91
92-M-1	12/24/97
92-M-2	12/24/97
92-M-3	12/24/97
92-M-4	12/24/97
92-M-5	12/24/97
92-M-6	12/24/97
92-E-1	12/24/97
92-E-2	12/24/97
92-E-3	12/24/97
92-E-1	12/24/97
92-E-4	12/24/97
92-E-5	12/24/97
92-E-6	12/24/97
92-P-1	12/24/97
92-P-2	12/24/97
92-P-3	12/24/97

92-FP-1	12/24/97
92-FP-2	12/24/97
92-FP-3	12/24/97
92-T-1	12/24/97
92-T-2	12/24/97
92-T-3	12/24/97
92-T-4	12/24/97

(End of Documents)

ATTACHMENT B - LIST OF COMMENTS
T.A.A. 981102

Carr Futures

Note: The letter in parenthesis following the comment number are for Port Authority use only.

Structural

1.(W) DWG. A0.5, Hardware Schedule, Paragraph A: Provide a detail of the necessary embedment for the "floor closer." Show, by dimension, the extent of demolition needed to install the above floor closer.

2.(W) DWG. 92-A.1: Provide all missing section and elevation marks. Also, coordinate the given section and elevation marks with the appropriate drawings.

3.(W) DWGS. 92-A.3 and 92-P-3:

a) There appears to be a proposed core hole in the restricted zone at the intersection of column lines 142/202 on DWG. 92-A.3 and two at column lines 129/215 and 134/214 on DWG. 92-P-3. Either relocate these cores outside the restricted zone, or refer to the W.T.C. Design Guidelines, DWGS. STR-02 through STR-08 for rebar repair details and make them part of the set.

b) Locate all proposed cores by dimension using the face of glass as a reference.

4.(W) DWGS. 92-A.1, 92-A.4, 92-M-2 and 92-T-2:

a) DWG. 92-A.4: Provide a file cabinet legend marking, on this drawing, their sizes and number of tiers.

b) Check to see that the existing construction is not overloaded due to the added weight of the file cabinets, millwork storage shelving, raised floor, all equipment, etc.

5.(W) DWG. A8.1, Partition Type A1: Do not attach partitions to the ceiling system. Instead continue the studs to the concrete slab above specifying the fastener type, size, spacing, and embedment length into the existing construction.

6.(W) DWG. A8.3, Details 7 and 8: Coordinate the cold rolled channel's size and spacing with those shown on DWG. A0.1, Typical Ceiling Detail and DWG. PA-S-1.

Arch

7(W) Verify if type B partition is an one-hour rated wall. It is used in demising wall and its fire rating is not specified on Drawing A8.1. Also, one and two hour-rated partitions shown on egress plan are not matching the construction plan shown on Drawing 92-A.1. Please clarify.

HVAC

8(W) Drawing 92-M-1:

a. Condenser water C: Design Criteria B: Delete the water temperature for system 9 which is not applicable to this job and temperature is not 900 deg. F.

b. In condenser water closet on 93rd floor, use 3" valved outlets for future, not 2". This comment also applies to Drawing 92-M-6

c. Air from base building interior systems shall not be supplied to exterior zone, for example, in Conference room 9244. Please revise.

d. Delete the following induction units: between columns 144/145, 156/157, and 202/203.

e. The induction units located between columns 146/147, 152/153, 155/156, 424/425, 443/444, 449/450 will be reduced to one-half capacity. All induction unit modification shall use PA/WTC standard symbols listed on Drawing 92-M-1.

f. The following note shall apply to new fire-rated walls at Columns 243 and 424:

Remove existing 4" round flexible duct connection that penetrates the fire rated closure panel within the induction unit cover. Install new 4", 26 gauge galvanized steel circular duct, seal all joints with

3M Company 800 sealant and stainless steel adjustable type clamps.

g Delete the fire damper installation for two base building interior ducts 40x16 and 17 x 8 through new one-hour-rated demising walls.

h Verify the return air path inside computer room 9208 since base building return air stud has been extended outside the computer room.

9(W) Specification:

a. P. 15100-4 Add the following valve specifications:

Combination Balancing & Shutoff Valves shall be the eccentric non-lubricated plug valve, with adjustable memory stop and pressure tap, as manufactured by DeZurik. Rated working pressure and hydrostatic testing pressure (one and one-half times of rated working pressure) must be specified.

For Working Pressure From 200 psig through 450 psig:

1) Sizes 2 in. and under, DeZurik Series 100, Fig.128/WG/SP, screwed, carbon steel conforming to ANSI Class 300.

2) Sizes 2-1/2 in. and up, DeZurik Series 100, Fig.128 DFX001, flanged, carbon steel conforming to ANSI Class 300.

Condenser Water Regulating Valves shall be two-way, refrigerant pressure actuated, positive shutoff type, as manufactured by Metrex, Model WCCW-3099-SE-2W Series, design working pressure up to 350 psig.

b. P. 15851-7, K: Use two way head pressure water regulating valve, not three way. No condenser water flow shall be permitted when the compressor of AC unit is off. This comment applies to all AC unit specification.

c P. 15890-6 K.3 Flexible Duct: Maximum length is three feet to air terminal devices, not five feet. Please revise.

d P. 15890-8 15 c: All square elbows shall be provided with turning vanes maximum 4 inch on center.

e P.15910-4: Please add PA/WTC fire damper specification. Refer to PA/WTC Tenant HVAC Guide Specification Section 6 for details.

f P. 15990-4: Please add induction unit modification as a part of scope for air balancing work.

Plumbing

10(W) Change from 2 WTC to 1 WTC in all key plans of plumbing and fire protection drawings.

11(W) Drawing 92-P-2: Show the sizes of all future outlets: 4" for waste, 3" for vent, 2" for cold water, and 1" for hot water.

Specification

12(W) P. 15410-3 Piping Material: Please note that waste pipe should have same type of material for indirect waste, soil and vent piping.

Fire Protection

13(W) Drawing 92-FP-1:

a. General note 5: Add the following shutdown requirement:

The Contractor shall request fire standpipe riser and sprinkler shutdowns 48 hours in advance by notifying the PA/WTC Construction Inspector who will coordinate the shutdown. The Contractor shall insure that drainage will be discharged to an approved location or receptacle without causing damage to other work and property.

b. General notes 8: The cover plate of sprinkler heads must be chrome plated, not factory painted white finish. This comment also applies to Note 4 on Drawing 92-FP-2. Please revise.

14(W) Drawing 92-FP-2:

a. All tenant auxiliary hose stations must be connected to the existing capped outlets provided in Stairway B (Stairway 3), not in any other Stairways. Show FSP pipe sizes. Control valve will be required between hose station valve and riser branch if that branch serves three or more hose stations.

b. Provide portable fire extinguishers, to comply with New York City Fire Department Directive, dated September 17, 1980.

15(W) Drawing 92-FP-3:

a. PR-2766 pressure restricting device is required on the 92nd floor, with setting of 9. Please revise.
b. Fire hose cabinet detail: Use PR-2960 fog nozzle, not PR-2962. Use 125 ft. lined linen hose, not unlined linen hose.

16(W) Specification:

a. Add the sprinkler pipe insulation: Insulate all sprinkler piping and fittings within 15 feet of exterior wall with Manville Micro LOK fiberglass pipe insulation with all service jacket, or approved equal. Insulation shall be one inch thick with flame spread and smoke developed rating not exceeding 25/50.

b. P. 15300-4, C Design Criteria: Delete all grooved connections. The static pressure at the inlet of control valve on the 92nd floor of 1 WTC is 98.7 psig.

c. P. 15300-5,6: Revise the pipe and fittings as follow:

1. All wet system sprinkler piping shall be standard weight, Schedule 40 black steel pipe, conforming to ASTM A795/A53 with threaded cast iron fittings, Class 125, or malleable iron fittings, Class 150. Schedule 10 pipes, grooved piping, and mechanical grooved fittings are not permitted. Victaulic fittings are not permitted to be used for size 3 in. and under unless otherwise approved.

2. Nipples shall be extra-heavy, shoulder type, and of the same material as the pipe. Close nipples, adjustable sprinkler nipples, and bushings shall not be used.

3. Unless otherwise shown on the Contract Drawings, piping connections to equipment shall be made up with unions for piping 2 in. and smaller, and shall be flanged for piping 2-1/2 in. and larger.

4. Fire standpipe material for zone 2, 89th through 101st floors, shall be standard weight, schedule 40, black steel pipe, conforming to ASTM A53 with threaded cast iron fittings, Class 250, 350 # wwp. Fire standpipe test shall be hydrostatic at 200 psig. for 2 hours.

d. P. 153000-7, 2.04 and 2.05: Delete A,B,C and D. Cross reference to detail shown on Drawing 92-FP-3.

e. P.15300-8, 2.08 D: Revise as follow:

Unless otherwise specifically approved, hanger size and spacing shall be within the following limits:

Pipe Size	Max. Hanger Spacing	Min. Rod Size
1"	8 ft. o.c.	3/8"
1-1/4" to 2"	10 ft. o.c.	3/8"
2-1/2" to 3-1/2"	12 ft. o.c.	½"
4" and 5"	12 ft. o.c.	5/8"

The above hanger spacings apply to straight runs of pipe only. At points where valves, specialties, or branch connections are located, additional hangers, or supports shall be used to properly support the load.

f. P. 15300-10: Please note that Central Sprinkler is not permitted to use in PA/WTC. Revise sprinkler specification as follow:

In all finished areas, sprinkler heads shall be Reliable Automatic Sprinkler Co., Model G4 "Concealer," BS&A 587-75-SA, with a 165° F temperature rating. The cover plate of heads must be chrome plated, not factory painted white. For 1, 2, and 5 WTC, orifice size shall be ½", in 4 WTC orifice size shall be 7/16". Sprinkler heads in areas without hung ceiling shall be upright or pendent type, Reliable Automatic Sprinkler Co., Model G, BS&A 587-75-SA, with a 165° F temperature rating. For 1, 2, and 5 WTC, orifice size shall be ½", in 4 WTC orifice size shall be 7/16". For on/off type heads, use Reliable. —

Electrical

17.(W) Drawing E-102: Provide load data including diversity factors. Power at six watts per square foot (usuable) is available from the building system.

18.(W) Drawing E-317P: Speaker and strobe design is not acceptable as shown. Please call Rob Becker at 435-8641 prior to the next submission.

The Port Authority of NY & NJ

To: Dan Remeta
From: Danny Luey
Date: January 26, 1998

Subject: Tenant Alterations Review Request
Application No. WC98-1102 #1
Fire Protection Comments

1. Specification 15300

a) Section 1.01 A.: Revise last sentence to read "Contractor shall perform hydraulic calculations and submit to Engineer for approval."

b) Mechanical grooved fittings are not permitted. Revise sections 1.04 C. 1. e. and 2.01 accordingly.

c) Section 2.04 A.: Revise to read "Potter-Roemer Fig. #4075H, 2-1/2" angle hose valves, tested and certified to 1000 lbs for fire standpipe service in tower buildings are in stock at the WTC Stockroom and are available for WTC Contractors as required."

d) Section 2.04 D.: Revise to read "Provide Potter-Roemer Fig. 2766, 2-1/2" brass adjustable pressure reducing valve where normal hydrostatic pressure at 2-1/2" hose outlet exceeds 85 psig.

e) Section 2.08 D.: Add maximum hanger spacing.

f) Section 2.10 A.: Revise to read "Provide 4-1/2" dial gauges ..."

g) Section 2.14 B. 2.: Revise to read "... Model A, chrome plated."

h) Add following "2.21 Insulation: Insulate all sprinkler piping and fittings parallel to and within 15 feet of exterior wall with Manville Micro LOCK Fiberglass pipe insulation with all service jacket, or approved equal. All insulation (including jacket, or facing and adhesive) shall have composite fire and smoke hazard ratings, as tested by procedure ASTM E-84, NFPA 255 and UL 723 not exceeding a "Flame Spread" of 25 and "Smoke Developed" of 50."

i) Section 3.01 H.: No deluge systems are in submitted scope of work; delete item.

j) Section 3.04 A.: Revise to read "... and obtain required approvals."

2. Drawing 92-FP-1:

a) NYC Building Dept Fire Standpipe Note 20: Revise to read ".. above final grade."

b) General Note 7: Revise to read "Contractor shall prepare hydraulic calculations and plans, and submit to the Engineer for approval."

c) General Note 8: Revise to read "The heads must be chrome plated."

3. Drawing 92-FP-2, Note 4.: Revise to read "The heads must be chrome plated."

4. Drawing 92-FP-3, Fire Hose Cabinet Detail: Revise Detail 'A" to show "PR-4075H" cast brass angle valve.

TENANT ALTERATION PLUMBING REVIEW

The Port Authority of New York & New Jersey . Engineering Department .

APPLICATION & SUBMISSION # : WC98-1102-001

DUE DATE: 1/ 27 /98

COORDINATOR: D. REMETA EXT: 8594

FACILITY: 1-WTC/92

TENANT: CARR FUTURES

CHARGE: W2-981-102

BUILDING CODE: NYC

DISCIPLINE: PLUMBING DWG.S

REVIEWED BY: V. FIORE EXT: 7466

DATE: 1/ 26 /98

COMMENTS:

NO COMMENTS

THE P(T AUTHORITY OF NEW YORK & NE' JERSEY
ENGINEERING DEPARTMENT - DESIGN DIVISION TAA ..EVIEW REQUEST

D. LUEY (73E)

To: H. MAC DONALD (735) (Reviewer) Location: _____

From: QAD DESIGN STANDARDS Date: 1/21/98

TAA # WC98-1102-001 (Submission #) Facility: 1 WTC/92

Tenant: CARR FUTURES Rec'd. Date: 1/15/98

Description of Work: TENANT BUILDOUT

Charge Code: W2-X-X-981.102

Review Disciplines

- ☐ Architectural
- ☐ Structural
- ☐ HVAC
- ☑ ~~Plumbing~~
- ☑ Fire Protection/ Sprinklers/Etc.
- ☐ Electrical/Metering
- ☑ Utility> 600 V/ 5 KV
- ☐ Civil
- ☐ Geotechnical
- ☐ Environmental/Asbestos Abatem't.
- ☐ Fueling
- ☐ Radio Frequency Coordination
- ☐ Corrosion Protection
- ☐ Elevator/Escalator
- ☑ Traffic
- ☐ Other(specify)_____

Attachments

- ☐ Document List
- ☑ ~~Contract Drawings~~
- ☑ ~~Contract Specifications~~
- ☑ Tenant Response
- ☐ Calculations
- ☐ Catalog Cuts
- ☐ Reports
- ☐ Certifications
- ☐ Previous Rider
- ☐ Other (specify)_____

Special Instructions

Reviewer Information

Name_____
Date started _____
Date completed _____
Review time(days) ___
New comments ___
Repeat comments ___

DUE DATE: 1/27/98

Please notify the COORDINATOR if you cannot complete the review by the due date.

Please review the attached submittal; FAX and send your written comments to the following COORDINATOR:

Name: D. REMETA Location: 51 N

Phone #:(212) 435-8594 FAX #: (212) 435-8555

THE P[illegible] T AUTHORITY OF NEW YORK & NE[illegible] JERSEY
ENGINEERING DEPARTMENT - DESIGN DIVISION TAA ..EVIEW REQUEST

D. LUEY (73E)

To: H. MAC DONALD (735) (Reviewer) Location: _____

From: QAD DESIGN STANDARDS Date: 1/21/98

TAA # W698-1102-001 (Submission #) Facility: 1 WTC/92

Tenant: CARR FUTURES Rec'd. Date: 1/15/98

Description of Work: TENANT BUILDOUT

Charge Code: W2-X-X-981.102

Review Disciplines

- ☐ Architectural
- ☐ Structural
- ☐ HVAC
- ☒ Plumbing
- ☒ Fire Protection/ Sprinklers/Etc.
- ☐ Electrical/Metering
- ☒ Utility> 600 V/ 5 KV
- ☐ Civil
- ☐ Geotechnical
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- ☐ Fueling
- ☐ Radio Frequency Coordination
- ☐ Corrosion Protection
- ☐ Elevator/Escalator
- ☒ Traffic
- ☐ Other(specify)_____

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- ☐ Document List
- ☒ Contract Drawings
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- ☐ Certifications
- ☐ Previous Rider
- ☐ Other (specify)_____

Special Instructions

Reviewer Information

Name_____
Date started _____
Date completed _____
Review time(days) ___
New comments ___
Repeat comments ___

DUE DATE: 1/27/98

Please notify the COORDINATOR if you cannot complete the review by the due date.

Please review the attached submittal; FAX and send your written comments to the following COORDINATOR:

Name: D. REMETA Location: 51 N

Phone #:(212) 435-8594 FAX #: (212) 435-8555

THE PORT AUTHORITY OF NY & NJ

ONE WORLD TRADE CENTER
NEW YORK, NY 10048

(212) 435-7000
(973) 961-6600

January 27, 1998

Mr. David Mangold
Carr Futures
2 World Trade Center 62nd Floor
New York, N.Y. 10048

RE: CARR FUTURES - 1 WTC, 92ND FLOOR - T.A.A. 981102 – NEW BUILD OUT – FLOOR REPAIRS

Dear Mr. Mangold:

As Per your request I am informing you of the following:

Core hole reparation and leveling of the above mentioned project will be completed by February 15, 1998. The floors will be sealed with no negative effect on your carpeting.

All correspondence and inquiries should be directed to: Mr. Sam Murray, at One World Trade Center, 88 South, New York, NY 10048, telephone (212)435-8240.

Sincerely,

Sam Murray, Project Manager
Tenant Project Management Unit
World Trade Department

THE PORT AUTHORITY OF NY & NJ
QUALITY ASSURANCE DIV.
ENGINEERING DEPT.
JAN 30 1998
RECEIVED RTP
NOTED
REFERRED TO 98-1102
WCJ JPR

cc: S. Murray, K. Piatt, T. O'Connor, G. Melendez, T. Koebel

bcc: D. Bergstein, B. Colendenski*, E. Daly*, G. Donohue, Fadavi, G. Gaeta, E. Monteverde, J. Napolitano, R. Pisapia**, J. Protas N. Seliga, Central File*, Chrono File*

THE PORT AUTHORITY OF NEW YORK & NEW JERSEY

TENAN ALTERATION APPLICATION REVI / REQUEST

DISTRIBUTION		
No.	To	Facility
(4)	Quality Assur.	51N
(1)	S. Batra	88S
(1)	R. Becker	88S
(1)	S. P. Chiao	88S
1	J. Napolitano	88S
(1)	J. Castaldo	2WTC 37
	P. Taylor	2WTC 37
(1)	D. Warren	PATC ZIP 43
1	C. Bonacci	2WTC 35

Facility 1 WTC 92nd FL TAA No. 981102 Date 1/9/98

Application / Tenant Carr Futures

Consultant Gensler

Estimated Cost $1,500,000 Submittal No. 01

Description of Work

New tenant Build-out

Professional Certification

Please review the attached (revised) application and send comments to:

Name Sam Murray

Location 1 WTC, 88S Phone No. 435-8240

1/24/98 DUE DATE

DESIGN DISCIPLINES

- [X] Architectural
- [ ] Egress Analysis
- [X] Structural
- [X] HVAC
- [X] Plumbing
- [ ] Sprinklers
- [X] Electrical
- [ ] Utility > 600 V
- [ ] Civil
- [ ] Geotechnical
- [ ] Environmental
- [ ] Fueling
- [ ] Radio Freq. Coord.
- [ ] Corrosion Protection
- [ ] Elevator / Escalator
- [ ] Other

ATTACHMENTS

- [ ] Document List
- [ ] Contract Drawings
- [X] Contract Specifications
- [ ] Tenant Response
- [ ] Computations
- [ ] Reports
- [ ] Catalog Cuts
- [ ] Other

DESCRIPTION

THE PORT AUTHORITY OF NY & NJ
QUALITY ASSURANCE DIV.
ENGINEERING DEPT.
JAN 15 1998
RECEIVED
NOTED:
REFERRED TO:

Special Instructions

THE PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT. QUALITY ASSURANCE DIV.
DESIGN STANDARDS
JAN 15 1998
WC98-1102 (1)
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

Copy To: G. GAETA, E. Daly, T. Lynch
E. Monteverde, N. Seliga
G. Melendez (Proj. Mgr)

J. Napolitano (w/2 sets)

Sam Murray
Signature

OFFICE COPY

PA 21[illegible] 7/5-94

PA 531 ALT

File Fee #
Contract #

THE PORT AUTHORITY OF NY & NJ
One World Trade Center, New York, N.Y. 10

For Port Authority use only	
FACILITY 1 WTC 92	APP.NO 981102
DATE 1/23/98	APPLICANT'S NAME Carr Futures

TENANT CONSTRUCTION OR ALTERATION APPLICATION

APPLICANT MUST READ THE TERMS AND CONDITIONS PRINTED ON THE REVERSE HEREOF

The Applicant shall not commence performance of any of the said work prior to the receipt by Applicant of a copy of this application duly signed in Part Two hereof on behalf of The Port Authority of New York and New Jersey. Upon receipt thereof, the Applicant agrees to perform said work in accordance with the following "Information to be Furnished by Applicant" and to comply with and be bound by all requirements and conditions set forth below under the remarks, if any, in Part Two hereof and the terms and conditions set forth on the reverse hereof.

PART ONE: Information to be furnished by Applicant (Refer to your lease or permit for required information)

Permission is hereby requested to perform the following described work on the space occupied by the Applicant

AT (FACILITY)	PURSUANT TO (LEASE, SPACE PERMIT) NUMBER	LOCATION (BUILDING NUMBER OR AREA) OF SPACE TO BE ALTERED
1 WTC 92nd		1 World Trade Center, 92nd Floor

DESCRIPTION OF WORK AND REASON

Complete build-out of office space including support, pantries, conference rooms on a multi-tenant floor.

ESTIMATED COST OF WORK	ESTIMATED TIME TO COMPLETE (DAYS)	STARTING DATE	COMPLETION DATE
$1,750,000	80 Working	01/12/98	05/01/98

Plans: Prints of each drawing must be submitted with copies of application. Include floor plan and show area affected by proposed work (size 8 1/2" x 11" or larger).

TITLE OF DRAWING	DRAWING NUMBER	DATED
See attached list		

NAME & ADDRESS OF CONTRACTOR (IF NOT KNOWN, SUBMIT LATER)

NAME AND ADDRESS OF ENGINEER OR ARCHITECT
Thomas F. Cavanagh
GENSLER
1 Rockefeller Pl. NYC, NY 10020

TELEPHONE NUMBER 212/492-1400
LICENSE NUMBER 020771

SEND CORRESPONDENCE TO:
(NAME AND ADDRESS OF EMPLOYEE IN CHARGE OF WORK)
Mr. David Mangold
CARR FUTURES
2 World Trade Center
New York, NY 10048

TELEPHONE NUMBER (212) 278-2900

APPLICANT'S NAME (AS IT APPEARS ON LEASE OR PERMIT)
CARR FUTURES

ENGINEER OR ARCHITECT CERTIFICATION

I have supervised the preparation of plans and specifications for the entire work represented herein and hereby certify that they conform to the requirements of the respective enactments, ordinances, resolutions and regulations of the City, town or municipality in regard to construction and maintenance of buildings and structures and in regard to health and fire protection which would be applicable if the Port Authority were a private corporation.

BY (SIGNATURE OF AUTHORIZED REP.)	TITLE	DATE	SIGNATURE OF LICENSED PROFESSIONAL ENGINEER OR ARCHITECT	DATE
[signature]	SR VP	1/23/98	[signature]	12/17/97

The Contractor by signing below agrees to all the terms and conditions on this application and printed on the reverse side thereof, including #5 indemnifying the Port Authority, and further agrees to be bound by all riders and schedules attached to this application

Signature: _____ / / _____
(Contractor) Date

Address: _____

☒ The Applicant must check here if the Professional Certification Program is elected for tenant construction or alteration in the World Trade Center.

OFFICE COPY

Signature: [signature] 4/22/98
(Applicant Officer/Partner) Date

Please advise the undersigned, in writing, when this work has been completed.

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PART TWO: Prepared by Port Authority and returned to Applicant

The above Application is ☐ Approved ☐ Disapproved. Subject to the following conditions:

☐ Continued on Rider "A," "B," "C," "F," and "G" (Rider G will be included only for the Professional Certification Program)

THE PORT AUTHORITY OF NY & NJ

INSPECTED BY	DATE	BY	TITLE	DATE
	/ /		Manager of Tenant and Technical Services/WTD	/ /

Buckslip THE PORT AUTHORITY OF NY & NJ

To: Lou Menno Location: 88S

From: Ron Pisapia / WTC 51N / (212) 435-8562 Date 1 / 14/ 98

RE: TAA #WC-98-1102
TENANT: CARR FUTURES
PROFESSIONALLY CERTIFIED PROJECT

CC: G. Gaeta, S. Murray

This will serve as notice that Engineering Quality Assurance will audit the above-referenced project.

Please submit a copy of the signed TAA form to begin the review process.

Thanks.

Ron Pisapia

Ron Pisapia
Quality Assurance Division

/lm

100% RECYCLED PAPER Soy Ink

PA 36
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